REMARKS/ARGUMENTS

After entry of this amendment, claims 1-20 will be pending in this application. Claims 6, 7, 13 have been amended. Claim 8 has been amended to correct a typographical oversight. Support for the amended claims can be found in the specification. No new matter has been added.

Claims 1-3, 7-9, and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the published article "High-Speed CRC Computation Using State-Space Transformations" by Derby (hereafter "Derby"). Claims 7-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weldon, United States patent number 5,140,596. Claims 1-3 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weldon. Reconsideration of these rejections and allowance of the rejected claims in light of these amendments and remarks is respectfully requested.

Claims 5 and 13-20 are allowed.

Claim objections

Claim 7 is objected to for two informalities. The pending office action states that the first of these is that line 6 of this claim should read "output…is coupled" instead of "output…are coupled." (See pending office action, page 2, paragraph 1.)

Applicants point out that the phrase reads "where an output of the feedforward circuit and an output of the feedback circuit are coupled to a logic circuit." (Applicant's claim 7, emphasis added.) Since multiple outputs are recited as being coupled, applicants submit that the present wording is correct. Claim 7 has been amended to correct the second objection listed in the pending office action.

Claim 1

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Derby. But Derby does not teach each and every element of this claim. For example, claim 1 recites "computing a plurality of feedforward bits for the first word by logically combining a plurality of the plurality of message bits into a plurality of logical expressions, combining the plurality of

logical expressions into a plurality of terms, and storing the plurality of terms as a plurality of feedforward bits." Derby does not provide these features.

The pending office action cites Derby as providing each and every element of this claim. (See pending office action, page 4, paragraph 6.) Specifically, the combining to form logical expressions and plurality of terms are said to be taught by Derby's use of "grouping of logic terms." (See pending office action, page 5, first full paragraph.)

Derby does not specify what is meant by "grouping of terms." (See Derby, page 170, column 1, starting at line 9.) But Derby does state that a second reference, reference [7], does employ grouping of terms. (See Derby, page 170, column 1, lines 36-39.) Reference [7] is listed as "High Speed Parallel CRC in Circuits in VLSI," by T-B Pei, IEEE Trans. Commum. vol. 40 pp. 653-657, April 1992. (Pei) (See Derby, page 170, column 2, lines 19-20.)

A schematic of Pei's CRC circuit employing grouping of terms is shown in Figure 2. In this circuit, eight bits of an input word are exclusive ORed with the eight highest-order bits of a total of 32 CRC bits. That is, input word bits are exclusive ORed with CRC bits, they are not combined into logic expressions. The outputs of these are exclusive ORed with either one of the 24 lowest-ordered bits, or with an output of another exclusive OR gate.

Accordingly, the grouping of terms employed by Pei, and thus taught by Derby, do not combine a plurality of the plurality of message bits into a plurality of logical expressions as required by the claim. Further, this grouping of terms does not provide combining the plurality of logical expressions into a plurality of terms, which is also required by the claim.

The Pei reference is being concurrently submitted in an information disclosure statement.

Claim 1 also stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Weldon. The basis of this rejection is not clear, as is not outlined in the pending office action. (See pending office action, page 5, paragraph 8.) In any event, Weldon does not provide combining a plurality of the plurality of message bits into a plurality of logical expressions or combining the plurality of logical expressions into a plurality of terms as required by the claim.

For at least these reasons, claim 1 should be allowed.

Other claims

Claim 7 should be allowed for similar reasons as claim 1. The other remaining rejected claims depend on either claim 1 or claim 7 and should be allowed for the same reasons and for the additional limitations they recite.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal notice of allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

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